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I, JULIE BILLINGSLEY, TEAM LEADER EXAMINATION SUPPORT AND  
SALES hereby certify that annexed is a true copy of the Provisional specification  
in connection with Application No. 2002950607 for a patent by YARRA RIDGE  
PTY LTD as filed on 05 August 2002.



WITNESS my hand this  
Twenty-first day of August 2003

*J. Billingsley*

JULIE BILLINGSLEY  
TEAM LEADER EXAMINATION  
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## PROVISIONAL PATENT APPLICATION

5   **Title:** Improvements in engaging members of door and window locks

In an embodiment for a wing, (a wing comprising either a door or window), the invention comprises one or more angularly displaceable bolts 2 supportable in a casing 1 which is attachable relative to a moveable wing. The bolt being displaceable between a retracted position shown in Fig 2 to an extended position shown in Fig 1 (and in the case of a self latching embodiment, by spring 3 biasing). The bolt is supported by a shaft 5 that is fixed relative to the casing. In the extended position a leading end portion of the bolt 6 (disposed from the pivotal axis protrudes from the face 7 of the casing which includes a bolt aperture 8 permitting passage of the bolt.

15   In practise, the lock also includes a catch or strike plate 9 with which the bolt can engage to restrain the wing from being displaced from the catch plate. In the extended position the leading portion of the bolt engages in a receiving aperture 10 in the catch plate. In a preferred embodiment, the leading portion includes at least one sideways protruding shoulder 11 that (when the bolt is engaged with the catch plate) locates behind an associated shoulder 12 on the periphery of the catch plate aperture as shown in Fig 1 to thereby restrain the bolt from being horizontally withdrawable from the aperture. The catch plate aperture has a horizontally widened mouth 13 at the entry end 14 to enable the bolt shoulder to have passage. Preferably there is a pair of bolt protrusions and the catch plate is adapted correspondingly.

25   To allow for vertical misalignment between the casing and catch plate the mouth 13 is vertically elongated. To further allow for said misalignment, the catch plate comprises a first portion 15 that includes the aperture 10 which is fixed relative to a second fixing plate 16 that is attached to an element surrounding the wing, eg. A door jamb.

30   Either the first plate or second plate has an elongated aperture at the upper and lower ends through which a rivet or other fastener is applied to connect the plates together which providing limited vertical displacement one relative to the other.

35   Preferably two such bolts are employed as shown in the figures each having as associated catch plate aperture and preferably when both are in the extended

position the inner edges 17 either abut or a disposed adjacent the bridge portion of the catch plate 19.

- 5 Where the catch plate first portion has become mis-aligned, displacement of the bolts to the extended position causes the first plate to displace to become aligned with the shoulders 17.

- 10 The latching feature mentioned above, is accomplished by restraining each bolt so the leading portion is in a fully retracted position within the casing or in a partly retracted position with some portion left protruding. Fig 2 shows a bolt having an engageable recess 18 which can be engaged by a shoulder 20 to restrain the bolt from being displaced by the spring 3 from the fully retracted position. If, alternatively the recess 19 were employed, the bolt would be restrained in a partly extended position by the shoulder 20. In either case, during closing of the wing, a plunger member (outwardly biased by spring 21) is engaged by the catch plate to be displaced inwardly from an undisplaced extended position to cause the arm 22 supporting the shoulder 20 to displace to release the bolt and by so doing enable the bolt to displace outwardly. The plunger has a sideways protruding shoulder 23 that when it is displaced slides down a ramped side 24 of the arm 22 to cause the
- 15
- 20 shoulder 20 to displace towards the plunger.

- For hinged doors, the bolt leading portion when viewed in the partly extended position preferably has slides that are similarly curved, tapered or otherwise profiled on both sides to facilitate inward displacement by contact with the catch plate.
- 25 Preferably the catch plate has an angled fin 26 as is common to facilitate this inward displacement of the latch as is common in security door locks. The use of the bolt described above in sliding wings would not necessarily require these features of curved sides and an angled fin.
- 30 It should be noted that the bolt described above is applicable to both surface mounted and mortice casings.

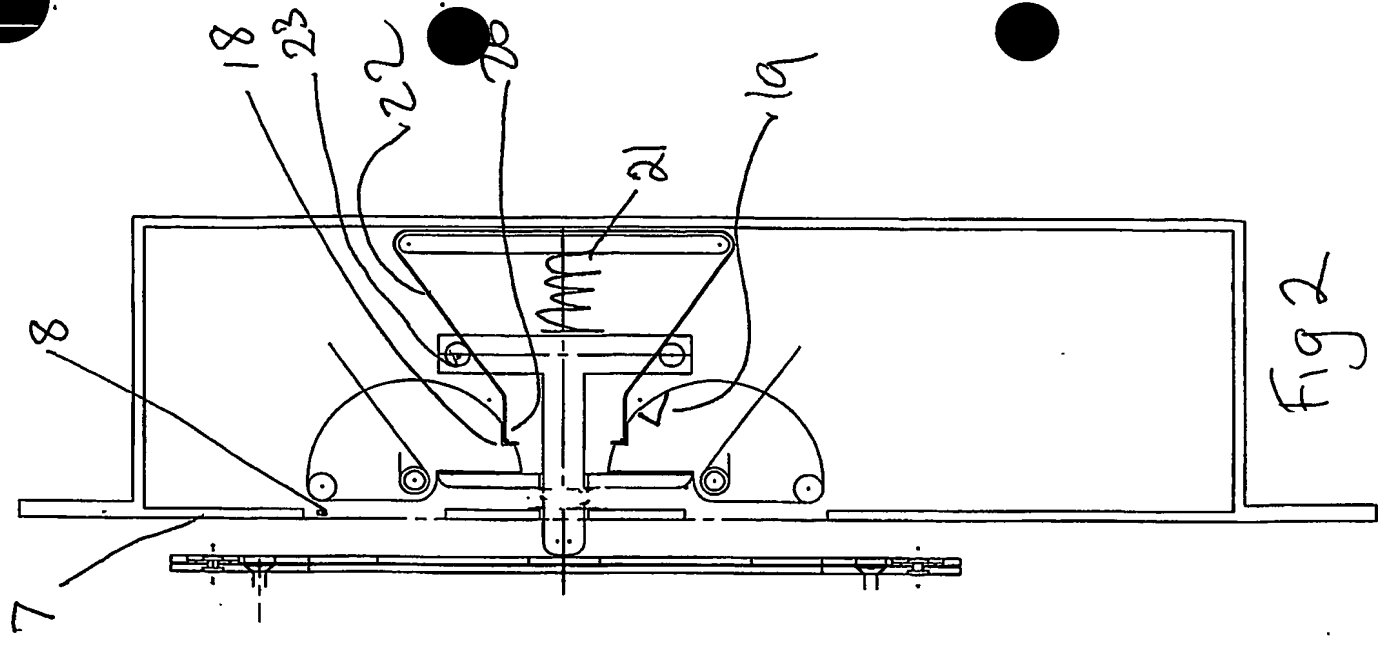
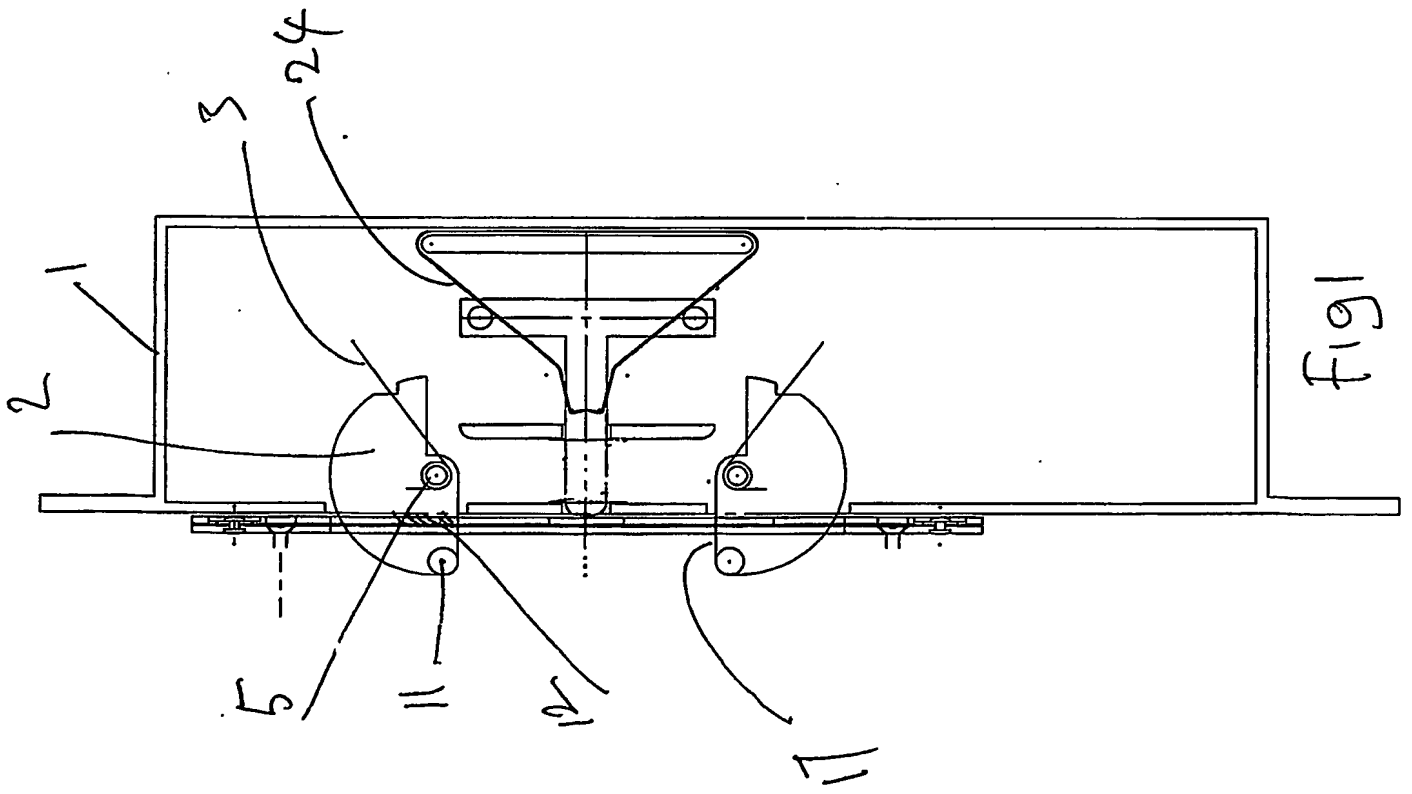
- Throughout this specification and claims which follow, unless the context requires otherwise, the word "comprise", or variations such as "comprises" or "comprising",
- 35 will be understood to imply the inclusion of a stated integer or group of integers but not the exclusion of any other integer or group of integers.

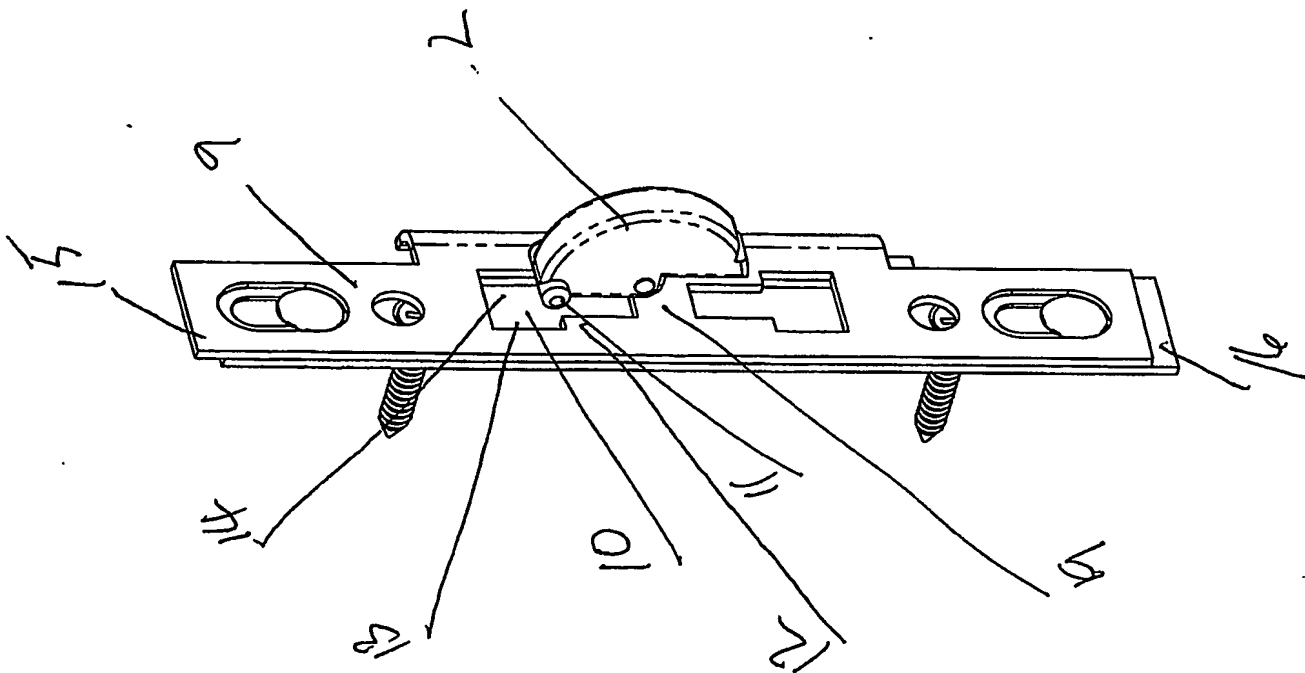
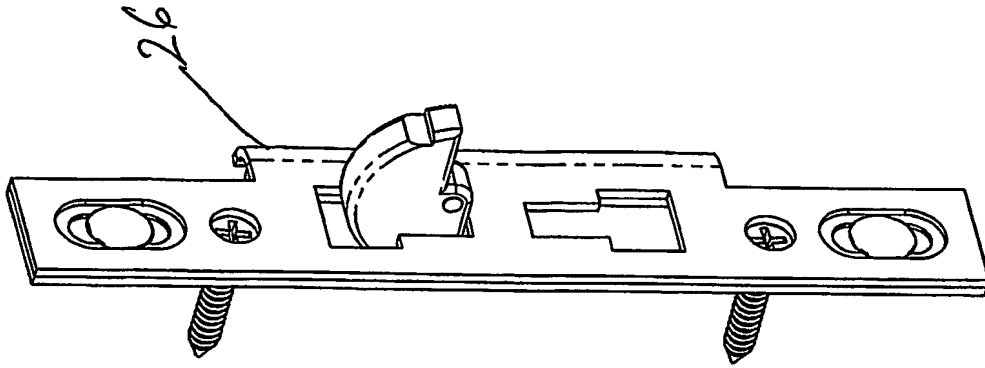
Throughout this specification and claims which follow, unless the context requires otherwise, the positional prepositions such as rear, forward are used to assist in description of the preferred embodiments and have in general no absolute significance.

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Yarra Ridge Pty Ltd

August 5, 2002





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